

Review

Worksheet 4.1

Part A Review

1. What instrument made the viewing of cells possible?

2. What important structure did Anton van Leeuwenhoek see with a simple microscope?

3. Who was the first person to use the term *cells*?

4. What did Matthias Schleiden state about plants?

5. What did Theodor Schwann state after viewing animal tissue?

6. What are the three parts of the cell theory?

Part B Skills Development

Reason by analogy

Write a sentence to explain how each analogy might be used to describe how cells are arranged.

1. Bricks in a building _____

2. Stacks of boxes _____

3. Rows of cans in a store _____

4. Apples in a box _____

Review

Worksheet 4.2

Part A Review

1. What parts do plant cells have that animal cells do not?

2. What is the control center for cell reproduction and most of the other cell activities?

3. What is the name given to all the functional parts that float in the cytoplasm?

Part B Skills Development

Make a table

Complete the table by writing the names or functions of cell parts.

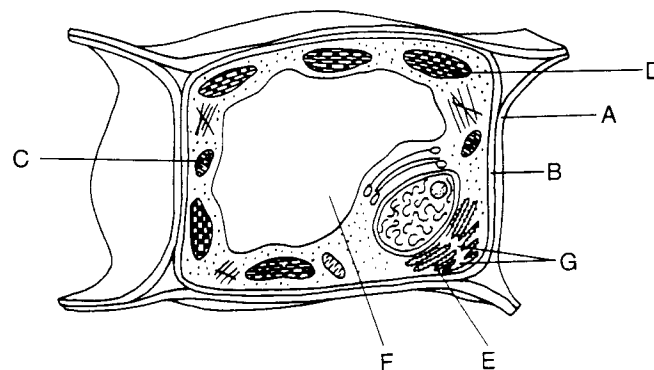


Figure 1 A Plant Cell

Table 1

Cell Part	Function
A. Cell wall	
B. Cell membrane	
C. Mitochondria	
D.	traps sunlight energy; makes glucose
E. Ribosomes	
F. Vacuole	
G. Endoplasmic reticulum	

Review

Worksheet 4.3

Part A Review

1. What is the name given to groups of specialized cells that are organized to perform a certain function?

2. What are tissues that work together to perform special functions called?

3. What system is made up of the heart, blood, and blood vessels?

4. What are the five main levels of organization in a many-celled organism?

5. What is the highest level of cell organization?

Part B Skills Development

Classify

P *Classify the following as tissue (T), organ (O), or system (S). Write T, O, or S in the space provided.*

- | | | | | |
|----------|----------------------------------|-------|------------------------------------|-------|
| B | 1. Group of blood cells | _____ | 8. Heart | _____ |
| 1. | 2. Liver | _____ | 9. Small intestine | _____ |
| | 3. Skull, cartilage, and bones | _____ | 10. Brain, spinal cord, and nerves | _____ |
| 2. | 4. Group of muscle cells | _____ | 11. Group of bone cells | _____ |
| | 5. Lungs, trachea, and diaphragm | _____ | 12. Lung | _____ |
| 3. | 6. Brain | _____ | 13. Group of nerve cells | _____ |
| | 7. Stomach lining | _____ | 14. Kidney | _____ |
| 4. | | | | |
| 5. | | | | |

Reteach

Worksheet 4.2

Plant and Animal Cells

How are plant and animal cells alike? How are they different? Use what you've learned about plant and animal cells to complete this worksheet.

1. Indicate which organelles or substances are parts of plant or animal cells by placing the correct letter inside the outlines in Figure 1. You will use some letters for both cells.

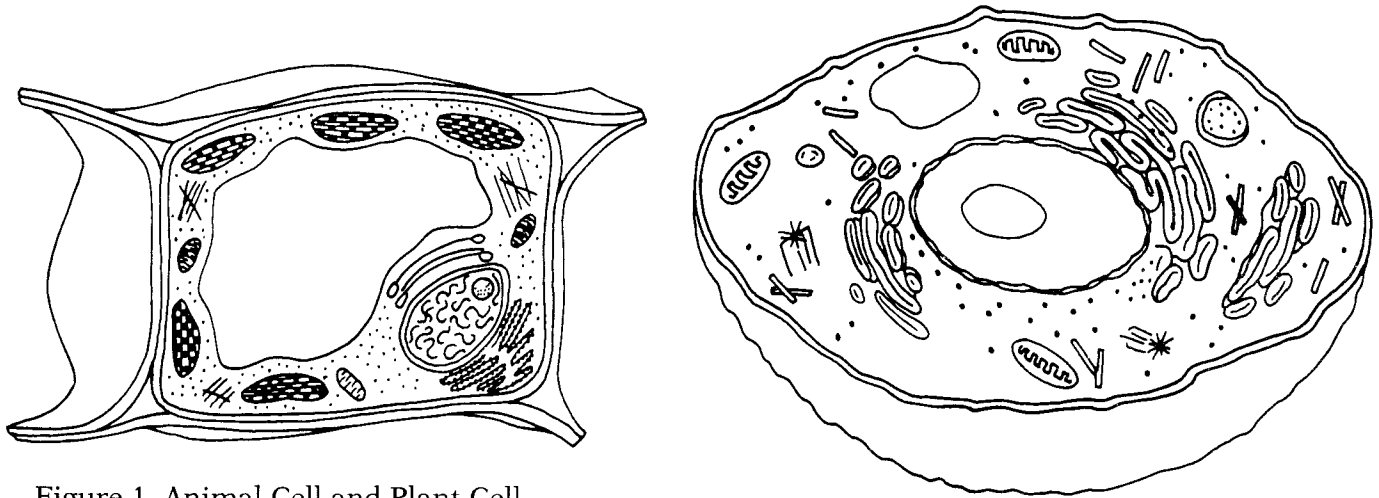


Figure 1 Animal Cell and Plant Cell

- | | | |
|---------------------|--------------------------|-----------------|
| A. Cytoplasm | F. Endoplasmic reticulum | J. Golgi bodies |
| B. Mitochondrion | G. Centrioles | K. Lysosomes |
| C. Nuclear membrane | H. Vacuoles | L. Nucleus |
| D. Cell wall | I. Nucleic acids | M. Ribosomes |
| E. Chloroplast | | |

2. Complete the Venn diagram in Figure 2 to show which structures are parts of plant cells, which are parts of animal cells, and which are parts of both.

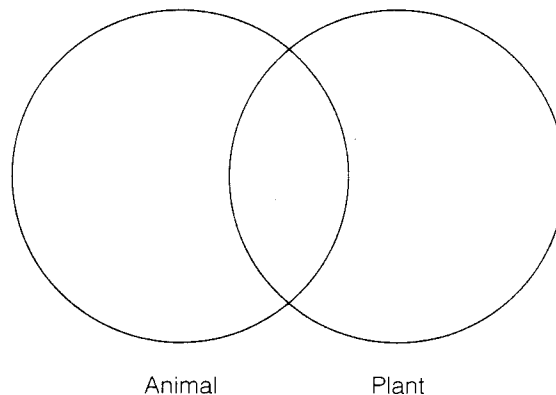


Figure 2 Venn Diagram